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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,677	01/18/2002	Andrew J. Zosel	005557.P006	5443

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EXAMINER

TRAIL, ALLYSON NEEL

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,677

Applicant(s)

ZOSEL ET AL.

Examiner

Allyson N Trail

Art Unit

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MW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11/4/03
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

9/23/02, 5/6/02

DETAILED ACTION

Claim Objections

1. Claim 8 is objected to because of the following informalities:

Re claim 8, line 6: replace "it" with --the confirmation projector--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 6, 7, 10, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ackley (6,330,974).

Ackley teaches the following in regards to claims 1 and 10:

An apparatus (figure 2, reference number 10) comprising: a base capable of receiving a camera (CCD, 36) including a lens (42), and a projector (illuminating means,

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claim 5) coupled to the base and adapted to project a plurality of beams of light (the beams of light are provided by the laser diodes, 34) onto a plane (the plane is where the one or two-dimensional bar code symbology is located) positioned at a focus distance from the base, wherein the projections of the beams of light on the plane are geometric shapes, and wherein an intersection of the geometric shapes is at the center of the field of view of the lens when the lens is installed on the base.

"In one embodiment, the operator may pull the trigger 14 to a first position for focusing, which illuminates the laser diodes 34 at a first (or lower) intensity level. The crossed beams can also function as a focusing tool, by enabling the operator to position the scanner 10 at the optimum distance from the bar code symbol 18. In this regard, the operator moves the scanner 10 until the intersection point of the beams coincides with the bar code symbol 18. Then, the operator pulls the trigger 14 to a second position, causing the laser diodes 34 to illuminate at a second (or higher) intensity level." (Col. 4, lines 27-35).

Ackley teaches the following in regards to claims 6, 7, and 13:

The scanning apparatus including first and second projectors (illumination means located, disclosed above), each comprising: a light source (laser diodes, 34), which each form a beam directed toward the plane; and a lens (42) for focusing the light beam emitted from the beam former.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-5, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (6,330,974) in view of Bunce et al (5,598,007).

Ackley's teachings are discussed above. Ackley fails to specifically teach the beams of light projected onto the plane being in the geometric shape of a bar.

Bunce et al teaches the following in regards to claim 2 and 11:

"Several cursor images are within the scope of the invention. In one embodiment, the first and second cursor images are bars which intersect to form an "X". In another embodiment, the first and second cursor images are a ">" and "<" which together form an "X". (Col. 4, line 66 – Col. 5, line 3).

Bunce et al teaches the following in regards to claims 3 and 11:

Claim 23, which discloses, "the step of shaping the first cursor beam includes forming the first cursor beam such that the first geometric shape is a first bar and wherein the step of shaping the second cursor beam includes forming the second cursor beam such that the second geometric shape is a second bar oriented at a predetermined angle relative to the first bar when the target object is at the fixed object distance from the detector assembly." (Col. 16, lines 60-67).

Bunce et al teaches the following in regards to claims 4, 5, and 12:

Figure 1 shows two beams being projected from the apparatus. It is known that small images and large images (that are being read by the scanner) have different focal lengths and field of views depending on how far from the scanning apparatus each

image is. Because of this fact, the desired object distance to ensure an accurate read varies from object to object. Bunnce et al teaches two beams in the geometric shape of a bar. It is clear that if the object to be scanned is close to the scanner, the two beams will meet each other at the end points and the two beams will form a carrot shape. If the object to be scanned is farther away, the two beams will bisect each other and form an "X" shape. Lastly, if the object to be scanned is even farther away, the two beams will intersect and form a "V" shape.

In view of Bunce et al's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to use two beams in the shape of a bar. Ackley teaches using two beams. Although Ackley fails to specifically teach the beams being in the shape of a bar, it is common for bar code scanners to use bar shaped beams. One would be motivated to use a bar shaped beam in order to produce the most effective scanning.

6. Claims 8, 9, 14-17, 19-21, 23, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (6,330,974) in view of Rigoni et al (EP1128315).

Ackley's teachings are discussed above. Ackley fails to teach a confirmation beam for confirming the processing of the image.

Rigoni et al teaches the following in regards to claims 8, 9, 15, and 17:

"In an apparatus and a method for acquiring and reading optical codes, the indication of the reading result is carried out projecting a luminous figure onto the optical code, that is to say in the position on which the attention of the operator is focused. The

luminous figure can have an information content also more complex than the simple indication of the end of the reading." (Abstract).

Teachings by Ackley regarding claims 14, 16, 19-21, 23, 27, and 28 are discussed above. Ackley however, failed to teach the limitation of the confirmation beam. Rigonie et al's teachings regarding the confirmation beam are discussed above.

In view of Bunce et al's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to include in Ackley's scanner a confirmation bean. Having a confirmation beam gives the operator a positive indication of whether or not the image was read and processed correctly. This indication allows the operator to know whether the code has been decoded before proceeding to read another code and makes the reading process more efficient.

7. Claims 18, 22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (6,330,974) in view of Bunce et al (5,598,007) and in further view of Rigoni et al (EP1128315).

Teachings by Ackley in view of Bunce et al regarding claims 18, 22, and 24-26 are discussed above. Ackley in view of Bunce et al however, failed to teach the limitation of the confirmation beam. Rigonie et al's teachings regarding the confirmation beam are discussed above.

In view of Bunce et al's teachings, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to include in the scanner

taught Ackley in combination with Bunce et al, a confirmation beam. (See above reasons to combine the scanner with the confirmation beam).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Correa et al (6,340,114), Li et al (6,065,678), Laser (5,992,751), and Ogami (6,095,422).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Allyson N. Trail* whose telephone number is (571) 272-2406. The examiner can normally be reached between the hours of 7:30AM to 4:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571) 272-2398.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [allyson.trail@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published

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in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG
89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Allyson N. Trail
Patent Examiner
Art Unit 2876
January 22, 2004

Jared J. Furman
Jared J. Furman
Art Unit 2876